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Search Results - Record(s) 1 through 4 of 4 returned.

1. Document ID: US 6891371 B1

Using default format because multiple data bases are involved.

L21: Entry 1 of 4

File: USPT

May 10, 2005

US-PAT-NO: 6891371

DOCUMENT-IDENTIFIER: US 6891371 B1

** See image for Certificate of Correction **

TITLE: Method and system of generating an MRS spectrum from multiple receiver data

DATE-ISSUED: May 10, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Frigo; Frederick J.	Waukesha	WI		
Heinen; James A.	Wauwatosa	WI		
Raidy; Thomas E.	Elm Grove	WI		
Hopkins; Jeffery A.	Pewaukee	WI		

US-CL-CURRENT: 324/307; 324/309

Full	Title	Citation	Front	Review	Classification	Date	Reference		Claims	Drawings
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2. Document ID: US 5570019 A

L21: Entry 2 of 4

File: USPT

Oct 29, 1996

US-PAT-NO: 5570019

DOCUMENT-IDENTIFIER: US 5570019 A

TITLE: Method for magnetic resonance spectroscopic imaging with multiple spin-echoes

DATE-ISSUED: October 29, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Moonen; Chrit T. W.	Silver Spring	MD		
Duyn; Jeff	Kensington	MD		

US-CL-CURRENT: 324/309; 324/307

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	AMC	Draw D.
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3. Document ID: US 5192909 A

L21: Entry 3 of 4

File: USPT

Mar 9, 1993

US-PAT-NO: 5192909

DOCUMENT-IDENTIFIER: US 5192909 A

TITLE: Spectroscopic localization using pinwheel NMR excitation pulses

DATE-ISSUED: March 9, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hardy; Christopher J.	Schenectady	NY		
Bottomley; Paul A.	Clifton Park	NY		
Cline; Harvey E.	Schenectady	NY		

US-CL-CURRENT: 324/309; 324/307

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	AMC	Draw D.
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4. Document ID: US 4585992 A

L21: Entry 4 of 4

File: USPT

Apr 29, 1986

US-PAT-NO: 4585992

DOCUMENT-IDENTIFIER: US 4585992 A

TITLE: NMR imaging methods

DATE-ISSUED: April 29, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Maudsley; Andrew A.	Woburn	MA		
Hilal; Sadek K.	New York	NY		
Simon; Howard E.	Monroe	CT		

US-CL-CURRENT: 324/309; 324/312, 324/320

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	AMC	Draw D.
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BODY	4231828
BODIES	493208
BODYS	433
SURFACE	8161920
SURFACES	2713709
COIL	1276720
COILS	423559
LOCAL\$2	0
LOCAL	763823
LOCALA	27
LOCALAD	2
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Search Results - Record(s) 1 through 1 of 1 returned.

1. Document ID: US 6891371 B1

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L25: Entry 1 of 1

File: USPT

May 10, 2005

US-PAT-NO: 6891371

DOCUMENT-IDENTIFIER: US 6891371 B1

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TITLE: Method and system of generating an MRS spectrum from multiple receiver data

DATE-ISSUED: May 10, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Frigo; Frederick J.	Waukesha	WI		
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Raidy; Thomas E.	Elm Grove	WI		
Hopkins; Jeffery A.	Pewaukee	WI		

US-CL-CURRENT: 324/307; 324/309

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	File	Drawings
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Term	Documents
BODY	4231828
BODIES	493208
BODYS	433
SURFACE	8161920
SURFACES	2713709
REFERENCE	5173804
REFERENCES	1641522
SCAL\$4	0
SCAL	9762
SCALA	1541

SCALAALY	1
(L24 AND ((SCAL\$4 OR WEIGHT\$4) WITH (BODY OR SURFACE OR LOCAL\$2 OR REFERENCE))).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	1

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L25: Entry 1 of 1

File: USPT

May 10, 2005

DOCUMENT-IDENTIFIER: US [6891371](#) B1

**** See image for [Certificate of Correction](#) ****

TITLE: Method and system of generating an MRS spectrum from multiple receiver data

Detailed Description Text (11):

The reference data, $r[n]$, undergoes DC mixing 116, zero phasing 118, linear phase correction 120 and phase spline smoothing 122, to determine a phase correction vector 124, $c[n]$. Additionally, the reference data, $r[n]$, is used to determine weighting 125 for the data of a respective coil. Simply, weighting 125 is carried out to determine data influence from a particular coil on a combined spectrum or image. Specifically, if it is determined that the data of a particular coil should be used, the reference data, $r[n]$, is also used to assign weight to the receiver channels.

Detailed Description Text (12):

The weighting 125 can be determined through multiple considerations. For a particular coil, a maximum magnitude for the averaged reference data, $r[n]$, can be used as a particular weighting factor, $w_{sub.i}$. Additionally, channels that have a significantly weak signal relative to the channel with the strongest signal are not used for the combined results and assigned a weight factor of zero. Specifically, in multi-channel MRS, regions of interest close to receive coil elements benefit from improved signal-to-noise ratios. Therefore, data received from regions of interest close to receive coil elements are appropriately weighted to take advantage of the improved signal-to-noise ratios. The signal characteristics from each coil depend on a number of factors including the orientation of the coil with respect to the $B_{sub.0}$ field, the proximity of the coil to the volume generating the signal, coil loading, coil-to-coil coupling effects, and the permeability and permittivity of the medium through which the radio-frequency signal travels prior to being received by the coil elements. Accordingly, the current invention weights data received to take advantage of the improved signal-to-noise ratios. Once weighted, the data is then normalized according to: ##EQU2##

Detailed Description Text (19):

respectively. Water subtraction 128, in which a scaled version of the reference data set is subtracted from the water-suppressed data set of each receiver channel, is performed and a Fourier Transform is applied 130 to the phase-corrected, water-suppressed data set, $S_{sub.corrected}[n]$, with residual water removed. Prior to computing a frequency spectrum, $S_{sub.results}[k]$, the data is zero-padded for greater resolution. The results of the Fourier Transform 130, for each receiver coil, where the number of receive coils is L , is combined 132 by summing the computed results from the frequency spectrum $S_{sub.results}[k]$, wherein

Detailed Description Text (42):

The reference data, $r[n]$, is subjected to the DC mixing 116, zero phasing 118, linear phase correction 120, and phase spline smoothing 122 to compute 124 a phase correction vector, $c[n]$. Additionally, the reference data sets, $r[n]$, are used to determine whether data from a particular coil should be used 125 to generate combined results. If it is determined that data from a particular coil should be

used, the reference data set, $r[n]$, is also used to assign weights 125 to each receiver coil.

Detailed Description Text (45):

As previously described, water-suppressed data sets are also collected 110 from each coil element and the data from each coil element is averaged to obtain a number of averaged, water-suppressed data sets, $s[n]$ 112. Data acquired during the reference acquisition is used to compute a phase correction vector 124 that is applied to the water-suppressed data 126. The reference data is also used to remove residual water. The phase correction vector, $c[n]$ 128, is applied to the reference data, $r[n]$ 127, and the water-suppressed data, $s[n]$ 126. Applying $c[n]$ removes residual water signal from the water-suppressed data sets, $r[n]$. Water subtraction 128, in which a scaled version of the reference data sets is subtracted from the water-suppressed data sets, is performed and a nonparametric technique, implementing an adaptive filter bank, is used to generate the results from the phase-corrected, water-suppressed data sets with residual water effects removed. Specifically, either a 2D Capon or 2D APES technique is employed. The current invention performs pre-processing of raw data prior to 2D Capon or 2D APES by applying the previously described method of MRS data pre-processing involving phase correction and residual water removal.

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1. Document ID: US 20030022105 A1

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L26: Entry 1 of 4

File: PGPB

Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030022105
 PGPUB-FILING-TYPE: new
 DOCUMENT-IDENTIFIER: US 20030022105 A1

TITLE: TWO -PHOTON UPCONVERTING DYES AND APPLICATIONS

PUBLICATION-DATE: January 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
PRASAD, PARAS N.	WILLIAMSVILLE	NY	US
BHAWALKAR, JAYANT D.	TONAWANDA	NY	US
CHENG, PING	WILLIAMSVILLE	NY	US
PAN, SHAN JEN	PLANO	TX	US

US-CL-CURRENT: [430/270.15](#); [128/898](#), [430/19](#), [430/270.18](#), [430/945](#), [514/356](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	TOC	Drawings
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2. Document ID: US 6891371 B1

L26: Entry 2 of 4

File: USPT

May 10, 2005

US-PAT-NO: 6891371
 DOCUMENT-IDENTIFIER: US 6891371 B1

**** See image for Certificate of Correction ****

TITLE: Method and system of generating an MRS spectrum from multiple receiver data

DATE-ISSUED: May 10, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Frigo; Frederick J.	Waukesha	WI		
Heinen; James A.	Wauwatosa	WI		
Raidy; Thomas E.	Elm Grove	WI		
Hopkins; Jeffery A.	Pewaukee	WI		

US-CL-CURRENT: 324/307; 324/309

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Drawings
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 3. Document ID: US 6402037 B1

L26: Entry 3 of 4

File: USPT

Jun 11, 2002

US-PAT-NO: 6402037

DOCUMENT-IDENTIFIER: US 6402037 B1

TITLE: Two-photon upconverting dyes and applications

DATE-ISSUED: June 11, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Prasad; Paras N.	Williamsville	NY		
Bhawalker; Jayant D.	Tonawanda	NY		
Cheng; Ping Chin	Williamsville	NY		
Pan; Shan Jen	Amherst	NY		

US-CL-CURRENT: 235/487; 235/454

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	KMC	Drawings
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 4. Document ID: US 5912257 A

L26: Entry 4 of 4

File: USPT

Jun 15, 1999

US-PAT-NO: 5912257

DOCUMENT-IDENTIFIER: US 5912257 A

TITLE: Two-photon upconverting dyes and applications

DATE-ISSUED: June 15, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Prasad; Paras N.	Williamsville	NY		
Bhawalkar; Jayant D.	Tonawanda	NY		
He; Guang S.	Williamsville	NY		
Zhao; Chan F.	San Diego	CA		
Gvishi; Raz	K. Tiron			IL
Ruland; Gary E.	Grand Island	NY		
Zieba; Jaroslaw	Santa Rosa	CA		
Cheng; Ping Chin	Williamsville	NY		
Pan; Shan Jen	Amherst	NY		

US-CL-CURRENT: [514/356](#); [250/338.1](#), [430/338](#), [430/343](#), [514/709](#), [522/6](#), [546/329](#),
[546/334](#), [568/34](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	DOC	Draw D.
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SCALA	1541
SCALAALY	1
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<input type="checkbox"/>	L2	L1 and ((magnetic adj resonance) or MRI or NMR)	16781
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END OF SEARCH HISTORY